

Rice University
Department of Psychology

PSYC 464/664: Usability Assessment Fall 2020
T-Th 9:40-11:00 (via Zoom)

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Office Hours (Zoom or Canvas discussion boards) Tuesday 2:00-3:00 or by appointment

Required Texts:

Kortum, P. (2016). *Usability Assessment: How to measure the usability of products, services, and systems*. HFES Press.

Other assigned readings will be posted on Canvas (C).

Learning Outcomes: At the end of this course, students will:

- 1) Be versed in the metrics used to assess usability in the laboratory and the field
- 2) Be able to perform expert (non-user-based) usability evaluations on systems
- 3) Be able to construct a valid usability testing plan, including participant recruitment
- 4) Be able to perform full-scale user based usability assessment in the lab and field
- 5) Be able to report the results of all assessments using industry standard methods
- 6) Have a clear understanding of methods used in special usability assessments for medical devices, web services and persons with disabilities

Lecture	Week	Topic	Readings
1	8/25	What is Usability? Introduction, Class logistics, and motivations for the course	UA: 1A, 1B
2	8/27	Dangers and myths of usability. Why assess usability? <i>Team formation</i>	UA 1C, 2, 3A C: Scott C: Mölich C:Greenberg
3	9/1	Special Cases: COVID and usability Project Selection	
4	9/3	Defining your user <i>Presentation topics due</i>	UA: 3B, 3C
5	9/8	Non-User assessment methods: Heuristics	UA: 3D C: Nielsen
6	9/10	<i>Exercise: Heuristic of your site</i>	
7	9/15	Non-user assessment methods: Cognitive walk through <i>Presentations begin</i>	UA: 3E, 3F C: Warton C: Spencer
8	9/17	<i>Exercise: CWT of your site</i>	
9	9/22	Usability Metrics: ISO 9241-11	UA: 4A C: ISO9241
10	9/24	Usability Metrics: Other measures and issue-based metrics	UA: 4A

11	9/29	Usability Testing Plan Test environments	UA: 4, 4B
12	10/1	Test timing Testing tools: logging tools and surveys IRB	UA: 4C, 4D, 4E, 4F
13	10/6	Running a standard protocol In class observation	UA: 5 C: Rosenbaum C: Dray
14	10/8	Alternate protocols: Think aloud and Co-discovery In class observation <i>Test plan Due</i>	C: Boren
15	10/13	EXAM 1	
16	10/15	Participant debrief	
17	10/20	Case study: Corporate web site formative assessment Case study: High Security voting Summative study	UA: 7, 8
18	10/22	Reporting your results	C: NIST CIF C: Voting CIF
19	10/27	Special usability topic: Usability through web analytics	UA: 6A C: Hasan
20	10/29	Special topics: Usability through card sorts	C: Spencer
21	11/3	Special cases: Medical usability, mobile usability, remote usability	UA: 6B, 6C, 6D C: Miller
22	11/5	Special populations: users with disabilities	UA: 6E C: Jaeger
23	11/10	Reflections on usability	
24	11/12	Presentations	
25	11/17	Presentations	
26	11/19	Presentations	

Attendance

All students are expected to attend class synchronously via Zoom. All students who are not in residence and living where the time zone is >4 hours from CST should contact the instructor to discuss your options. Even though it is a zoom class, please arrive to class on time. Lectures will be recorded for students who cannot attend due to illness. Please contact me before class if you are not going to join us.

Participation

A good deal of this class will entail open discussions of usability issues. Active, thoughtful participation is expected from every student. This is an active class – I'll ask questions and I'll expect that you will participate in the discussion even though we are on zoom.

Please keep your video **on** and microphone muted. The live video will help me talk to the class more effectively. When you want to ask/answer a question, just speak up! If it gets too crazy, we

may have to resort to hand raising. Late homework is not accepted, and missed presentations will be scored as a zero. Missed in-class exercises and exams cannot be made up.

Examinations: There will be one mid-term exam, but no final. The mid-term will be closed book/closed note and may cover any of the material assigned up to that point. This includes material from any of the assigned readings, my lecture notes, Lab tours, Lab exercises and presentations that other students have given.

Case study Presentations: Each student will be required to give one 10-minute presentation during the course of the semester on an applied usability paper/case study. You will select a paper from the academic literature that describes a usability assessment of a product or service. Your presentation will focus on the methods used, and your assessment of the results. Were the methods correctly applied? Are there weaknesses in the experiment? Are the results generalizable? Was the information from the test valuable in fielding the product? No report is required for this presentation, but you must supply me with a copy of the presentation material after the talk. Presentation topics are due on 9/3. Presentations begin on 9/15.

Project: 2-3 person teams will do a full usability assessment of a given website, using all the tools and analysis techniques learned in this class. At the end of the semester, each team will be required to give a 12-minute presentation (which includes time for questions) detailing the results of their usability assessments. A rubric will be posted on Canvas. Time is an element in the presentation score. You will also be required to be a participant in 3-4 other team' on-line usability tests, which will be counted in your project score.

Evaluation:

Heuristic evaluation report	10%
Cognitive Walkthrough report	10%
Test plan	15%
Case study presentation	5%
Mid-term exam	25%
Project presentation	10%
Project report	25%

Disabilities:

If you have a documented disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Support Services (Allen Center, Room 111 / adarice@rice.edu / x5841) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

Honor System Policy:

As with all endeavors at Rice, you are expected to adhere to the Honor Code and follow the guidelines given in the Honor System Handbook. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at <http://honor.rice.edu/honor-system-handbook/>. Exams are given under the honor system. There is no make-up for exams, presentations or in class assignments except for urgent medical situations or pre-approved circumstances of an exceptional nature. Students are encouraged to bring any concerns involving academic integrity to the attention of the instructor.

This syllabus is only a guide for the course and is subject to change with advanced notice.